



United States Nuclear Regulatory Commission

Protecting People and the Environment

NTTF Recommendation 2.1

Flooding

May 21, 2015

Office of Nuclear Reactor Regulation
Office of New Reactors



Japan Lessons Learned

Agenda

- **NRC**
 - Status of FHRR reviews
 - Staff response to SRM for COMSECY 14-037
 - Development of guidance for proposed rulemaking related to mitigation strategies
 - Public questions and comments
- **NEI**
 - Development of NEI 12-06 Appendix G – Mitigating Strategies Flood Hazard Assessment
 - Public questions and comments



FHRR – Flood Hazard Reevaluation Report

Status

- NRC received 19 FHRs for Category 3 plants – March 2015
- USACE sites: 8 sites granted extensions, 2 completed
- NRC issued 11 staff assessments
- Interim actions inspections completed for Categories 1 and 2. Underway for Category 3.
- Integrated assessments schedule will be revised



SRM-COMSECY 14-0037

- **Staff requested guidance on three items**
 1. Should mitigation strategies (MS) be capable of addressing reevaluated hazard?
 2. Is it acceptable for licensees to use targeted or scenario-specific MS to address specific flooding scenarios?
 3. Should Recommendation 2.1 Phase 2 decision-making be integrated into development and implementation of MS?
- **The Commission affirmed items 1 and 2 and disapproved item 3**
- **Action plan containing the response to the Commission is due June 30**



Expedited Review of Information Needed for MS

- Intermediate deliverable: Issue letters confirming acceptability of hazard for MS assessment
- Proposed schedule for issuance of letters:
 - 22 sites by August 2015
 - 22 sites by December 2015
 - 6 sites in 2016 (extensions and USACE information)



Enhance Review Efficiency

- Direct interface to resolve technical questions to shorten review and response timelines
- Combine site audits, webinars, and phone calls to leverage similarities between reviews and/or licensees
- Apply lessons learned from completed reviews.
- Leverage aspects of other Federal agencies' reviews for site-specific PMP studies



Industry's Timely Support Is Key

- Timely audits to support the schedule
- Timely availability of supporting material (e.g: input/output files; population of ERRs)
- Feedback on ability to support the schedule
- Expedited alignment on use of flood parameters and need for reinforcement/modification
- Consider limiting FHRR revisions to support the schedule



Developing Guidance to Assess MS

- Agency priority to support MBDBE proposed rulemaking (i.e. proposed 10 CFR 50.155)
- Proposed rulemaking extends Mitigation Strategies to meet the reevaluated hazard level
- Draft Regulatory Guide DG-1301 under development to support issuance for public comment by early August

- Staff is reviewing NEI 12-06 App. G for endorsement



MBDBE – Mitigation of Beyond Design Basis Events

Reassess Integrated Assessment Guidance

- Develop a graded approach to focus on plants with greatest opportunity for safety enhancements
 - Focused-Scope Assessment
 - Full-Scope Assessment
- Consider warning time to address local intense precipitation
- Consider available physical margin and protection modifications
- Target schedule for guidance incorporating the above is early-2016



Phase 2

- Will use the current regulatory processes.
- Allow flexibility in the way licensees address vulnerabilities identified through the Integrated Assessment process.
- Take into account the fact that licensees are protecting mitigating strategies equipment from the reevaluated flood.
- Consider the appropriate balance between protection and mitigation based on the principle of defense-in-depth.



Key Messages

- Expediting Mitigating Strategies Flood Hazard Information (MSFHI) letters by end of 2015 to support MS assessments
- Revised integrated assessment guidance by early 2016 to include a graded approach
- Next steps
 - Complete NEI 12-06 App. G review (July)
 - Issue MSFHI letters (2 groups: August and December)
 - Issue integrated assessment deferral letter (imminent)



Opportunity for Public Questions or Comments

Additional Questions? Please ask us at:

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